

US 31 Kokomo Collaborative Effort Yielded Successful Results

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Details



11 contracts



13 miles



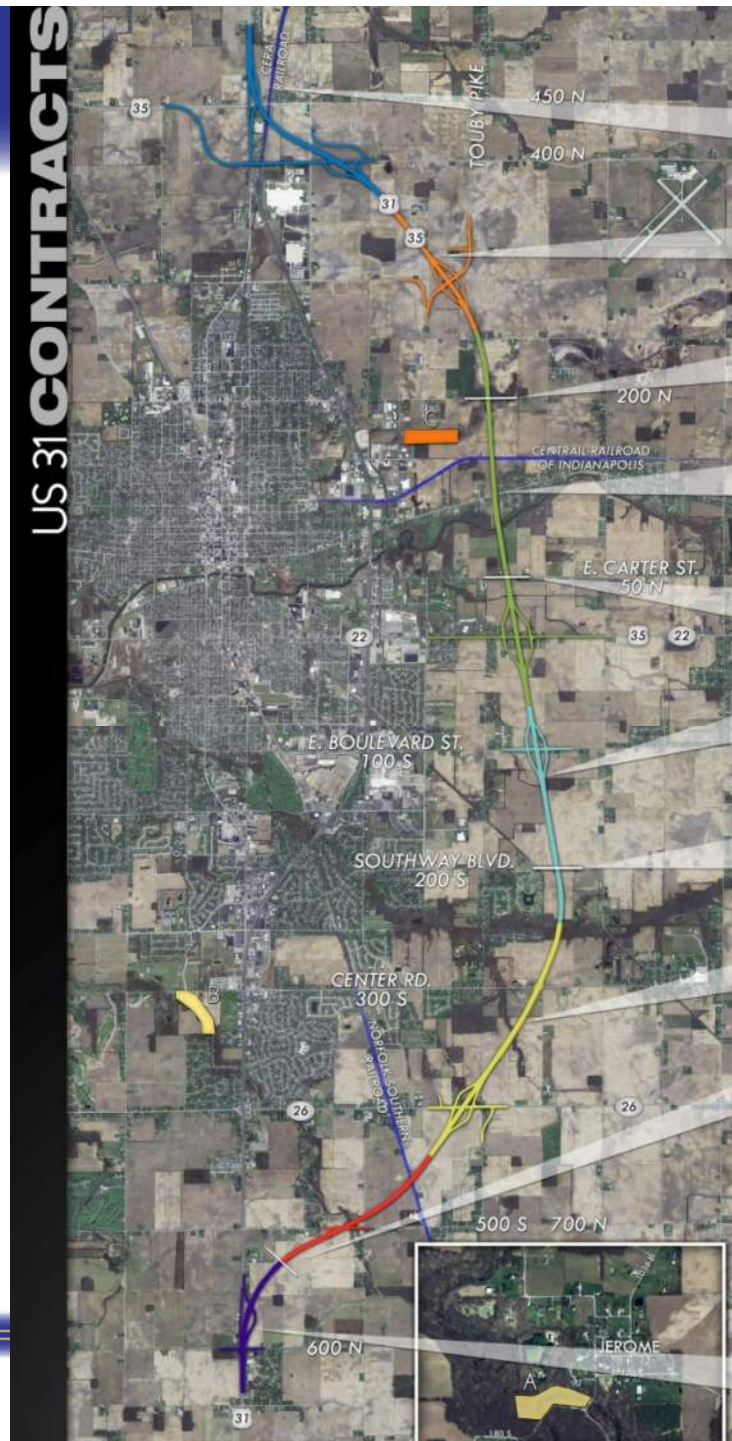
36 bridges



6 interchanges



US 31 CONTRACTS



contract 7
LET IN MAY, 2012

contract 10
LET IN AUGUST, 2011
C. TUDOR DRAIN WETLAND
MITIGATION SITE

contract 1c
LET IN FEBRUARY, 2010

contract 8
LET IN AUGUST, 2010

contract 1b
LET IN FEBRUARY, 2009
(COMPLETE)

contract 2
LET IN MAY, 2009
(COMPLETE)

contract 1a
LET IN AUGUST, 2008
(COMPLETE)

contract 3
LET IN APRIL, 2010

contract 4
LET IN NOVEMBER, 2011

contract 11
LET IN MAY, 2011
A. LOG JAM SITE IN JEROME
B. THE RESERVE ALONG EAST
FORK OF LITTLE WILDCAT CREEK

contract 12
LET IN APRIL, 2012

Details

■ Design Team



AMERICAN
STRUCTUREPOINT
INC.



NCI *NORTHWEST
CONSULTANTS*



■ Land Acquisition Team



Details

- Construction Inspection
 - INDOT Project Engineer and Inspectors
 - Consultant assistant PE/S



Details

■ Construction Team



US 31 Kokomo Keys to Success

Collaborative Effort between
INDOT and the
Consultant Design Team
from Cradle to Grave



US 31 Kokomo Keys to Success

Collaborative Plan

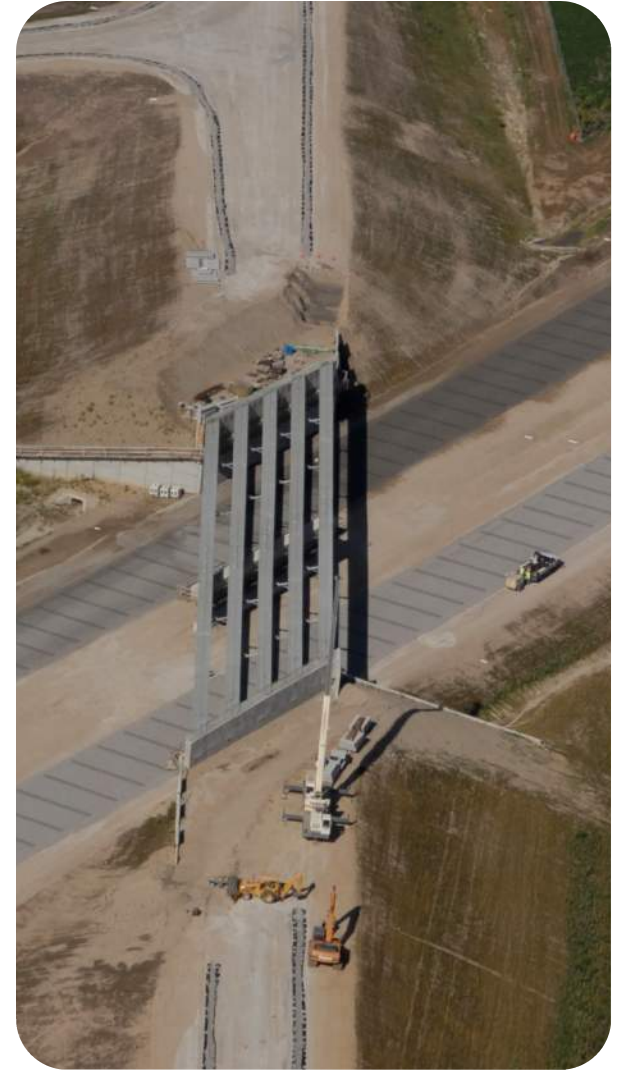
Design & Project Management

Construction



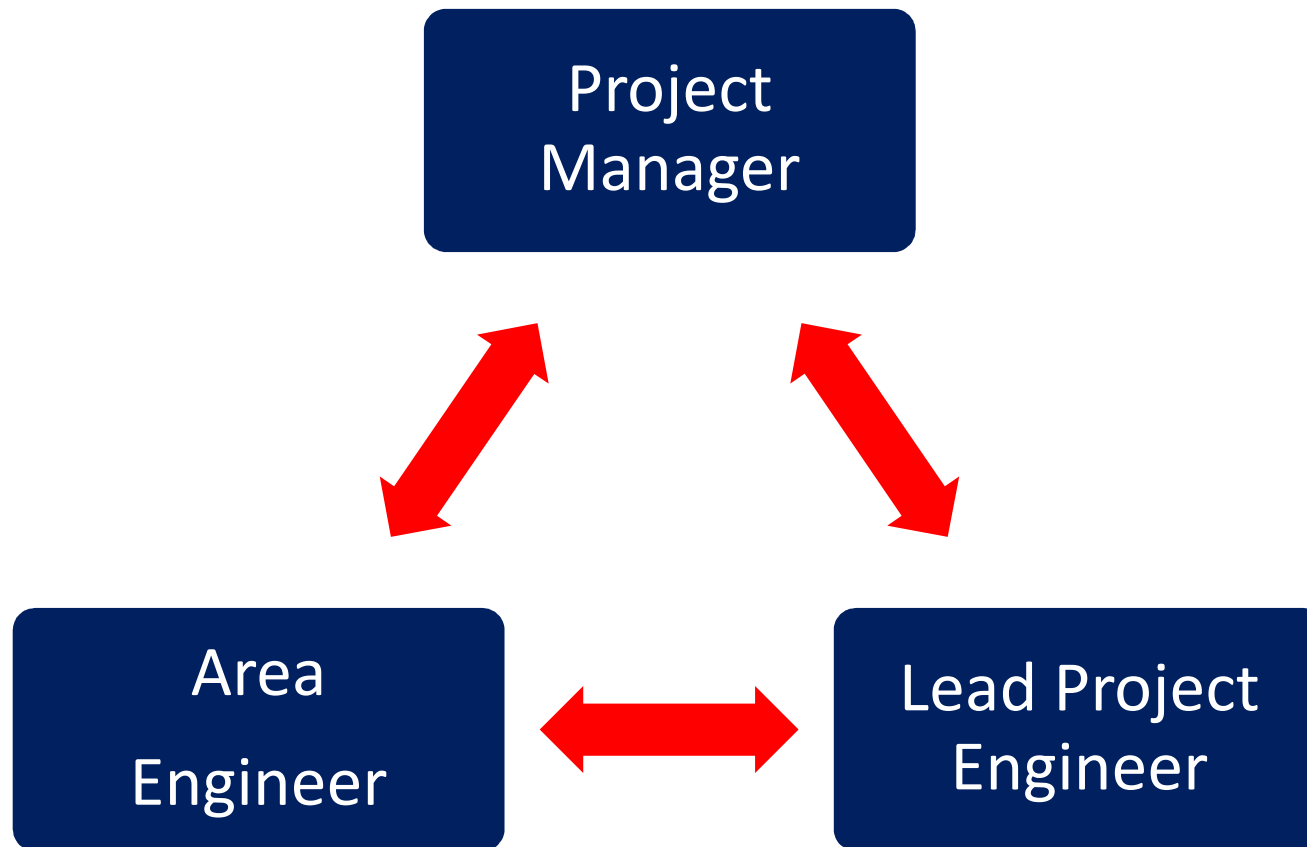
US 31 Kokomo Keys to Success

- Well Defined Scope of Services / Contingency Items
- Design Team
- Lead INDOT Construction Project Engineer
- Clear Communication Plan



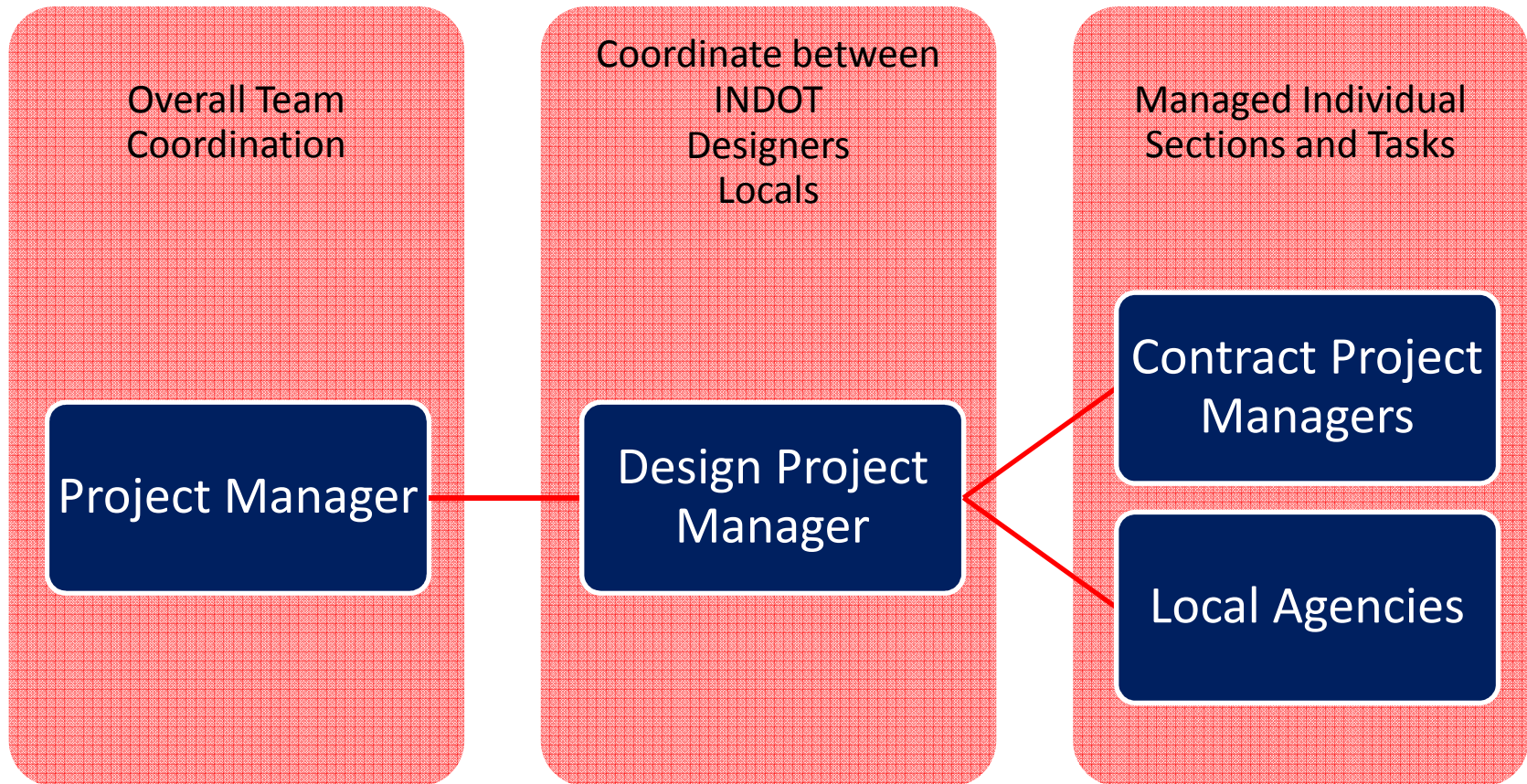
US 31 Kokomo Keys to Success

Design Stage (INDOT)

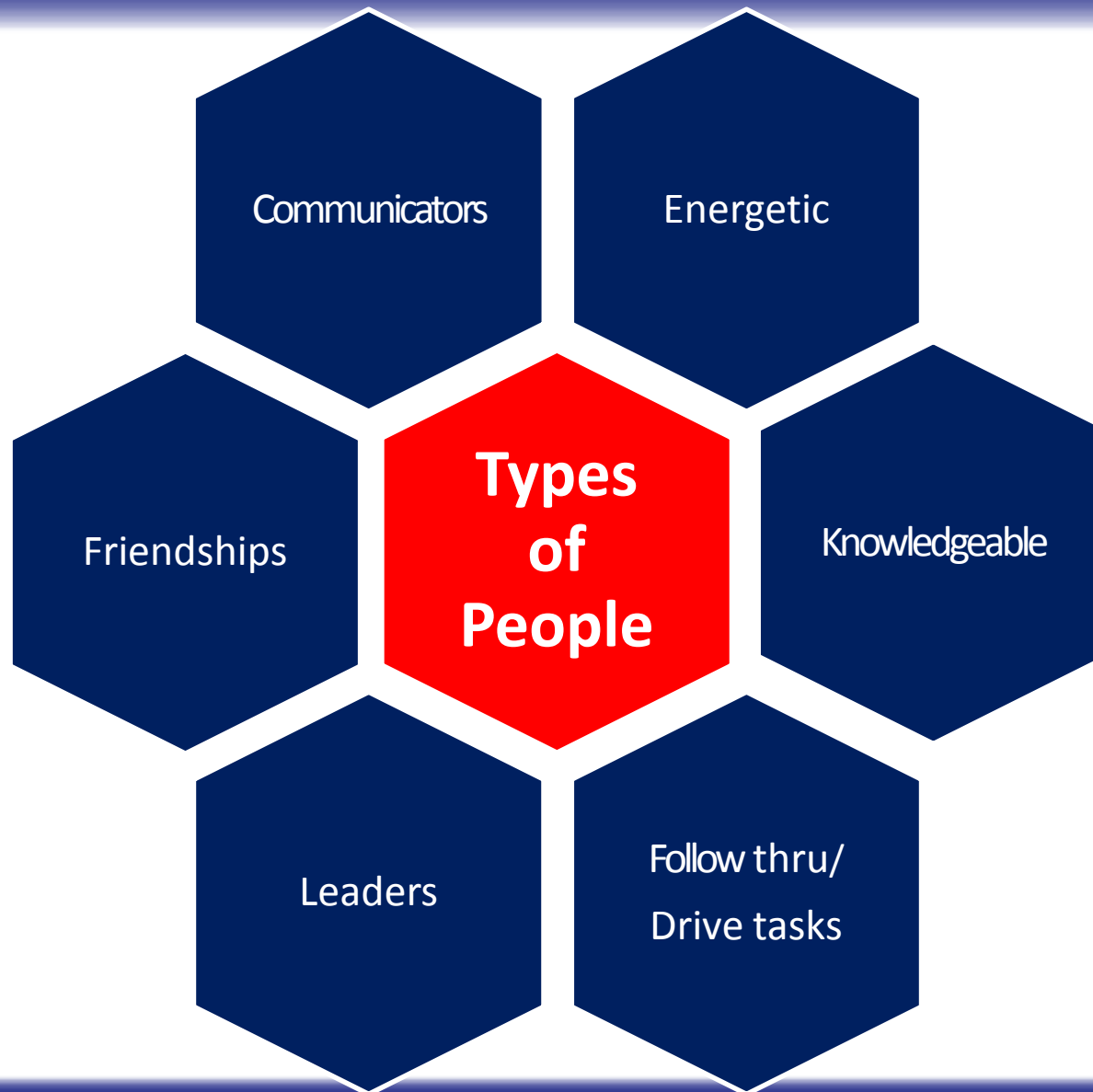


US 31 Kokomo Keys to Success

Design Stage (Designers)



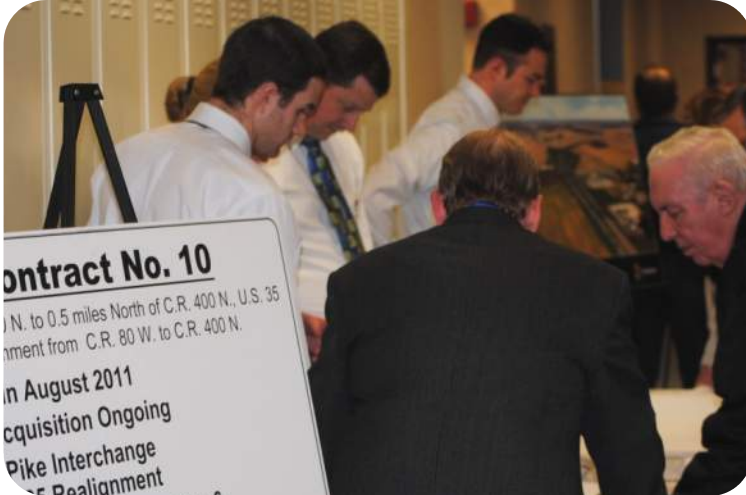
US 31 Kokomo Keys to Success



US 31 Kokomo Keys to Success

Design Stage (Followed PMP Process)

- Field Checks
- Constructability Reviews
- Plan Evaluations

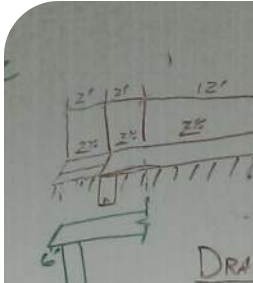


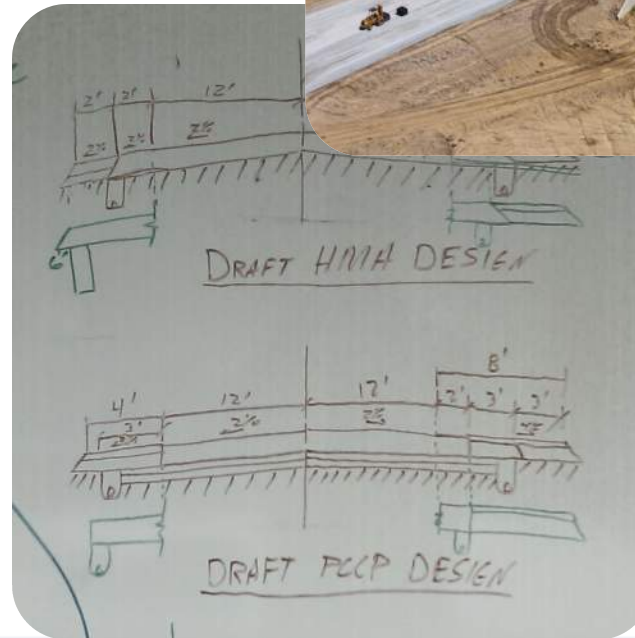
- Public Information
- Utility Coordination
- Traffic Management Plan



US 31 Kokomo Keys to Success

Design

- **Value Engineering**
 - Continuous thru Design
 - Constructability Reviews
 - **New Items**
 - Dual Pavement
 - ARRA Funding
- 
- A hand-drawn sketch of a bridge cross-section. The sketch shows a multi-lane bridge with dimensions: 2' for the top deck width, 2' for the deck thickness, 12' for the total width, and 2' for the bottom deck width. There are also labels for '2' and '2' on the sides. The sketch is labeled 'DRAW' in the bottom right corner.



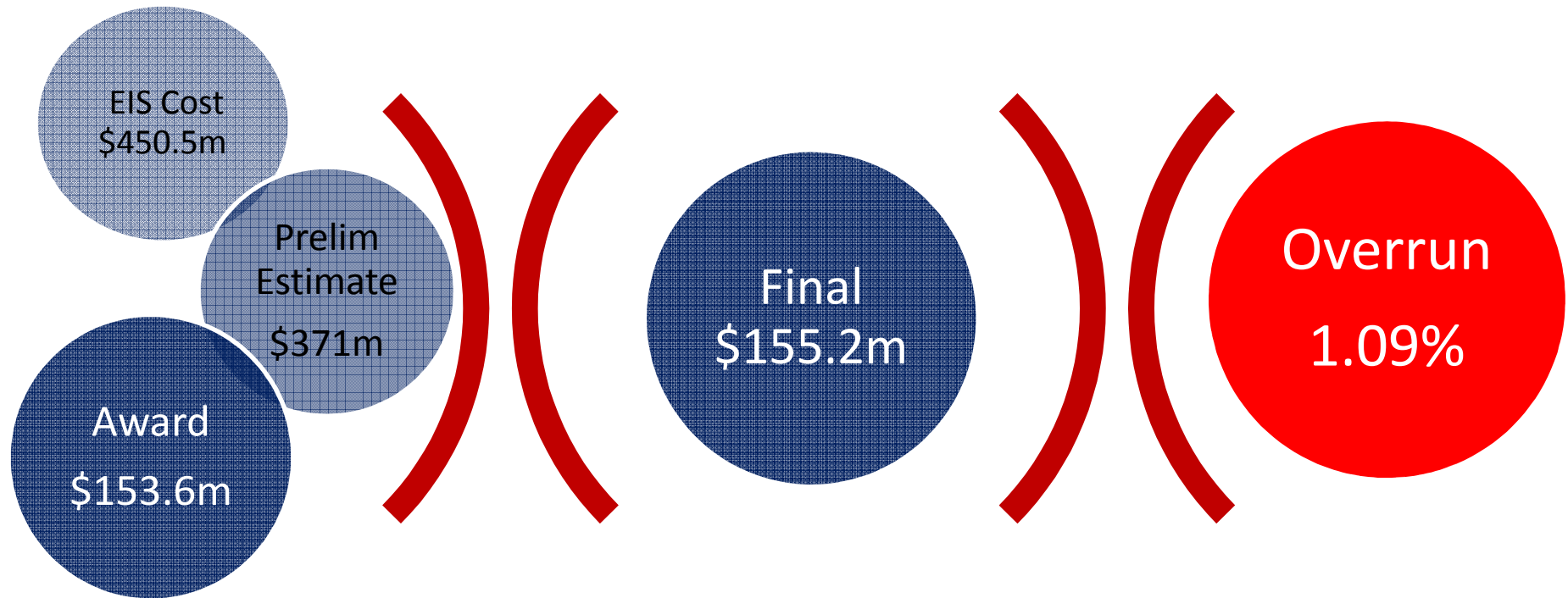
US 31 Kokomo Keys to Success

Drainage

- Field tiles
- Detention



US 31 Kokomo – Final Analysis



On Time & On Budget =



US 31 Kokomo Key Facts:



- **On Budget:**

- 1.1% total cost overrun on \$153.5 million awarded

- **On Time:**

- Accelerated construction schedule
 - driven by Governor Daniels and Governor Pence
- November 2013 deadline
 - Open November 26, 2013



US 31 Kokomo Budget:

- Of 11 contracts on the corridor:

- 5 contracts underran from

1%-8%



- 4 contracts overran from

0.3%-3.3%



- 2 contracts overran more than

5%



US 31 Kokomo Budget:

- **Reasons overran more than 5%**

- **IR-30107**

- 10.9% over budget, \$1.5 million over budget
- \$1.25 million CO for removing unsuitable material from unregulated, buried, unknown trash dump
- \$250,000 CO for Lime Soil Drying



US 31 Kokomo Budget:

- **Reasons overran more than 5%**
 - **IR-34454**
 - 7.0% over budget, \$1.0 million over budget
 - \$930,000 CO for Lime Soil Drying



US 31 Kokomo Keys to Success

What **ACTIONS** led to the successful endeavor?



US 31 Kokomo Keys to Success

Design Stage

- Design Team engaged INDOT at every step
- Collaborated and incorporated necessary changes
- Communicated changes not recommended



US 31 Kokomo Keys to Success

Construction Stage

- **Responsive Design Team**
 - Over 1500 e-mails between INDOT PE Sipes and Structurepoint
- **Dedicated INDOT Project Staff**
 - Staff Size Adequate
 - Project Engineers perform value engineering



US 31 Kokomo Keys to Success

Construction Stage

- Combined Corridor Field Office
 - Central Location - “One-Stop Shop”



US 31 Kokomo Keys to Success

**Simply put: We Followed INDOT Guidelines
for Project Management**

INDOT Project Management Page:

<http://www.in.gov/indot/2697.htm>



US 31 Kokomo Keys to Success

From INDOT Project Management Page:

“The Indiana Department of Transportation has endorsed constructability reviews to improve the total quality of our construction bid package. The narrow focus on just fixing problems has changed to the broader focus **of preventing problems**. The Department will ensure the use of construction knowledge and experience in planning and design to achieve the project objectives. While early involvement of construction personnel is most important, **multi-disciplinary teamwork is needed from the beginning**. There are few constructability concepts that are single discipline activities.”



US 31 Kokomo – Final Thoughts

- A lot of effort
- Hard work and collaborative effort of the team paid huge dividends;
 - Quality
 - Budget
 - Time to Completion
- Professionally and personally very rewarding



Thank you!

Questions

